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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,696	12/05/2003	Richard D. Borovoy	14109-003002	4580

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EXAMINER
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LIEU, JULIE BICHNGOC

ART UNIT	PAPER NUMBER
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2612

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/729,696	BOROVOY ET AL.	
	Examiner	Art Unit	
	Julie Lieu	2612	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-14 and 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-14 and 16-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/30/07</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office action is in response to Applicant's amendment filed December 12, 2006. Claims 1, 7, 8, 20, and 21 have been amended. Claims 9, 10, and 15 have been canceled. New claims 28-30 have been added.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-9, 11-14, 16-19, and 21-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification, as originally filed, fails to disclose the first and second sets of relationships.

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The specification also fails to disclose the relationship information including identifications of people.

If the Applicant contends that these are not new matter, specific pages or line numbers in the specification should be pointed out.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what is meant by “chared on common”.

***Claim Rejections - 35 USC § 103***

7. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lightman et al. (US Patent No. 6,711,414).

Claim 1:

Lightman et al. (Lightman) discloses a method of communicating face-to-face using two display units, the display unit of a second wearer being worn on his or her person in a manner visible to a first wearer, comprising:

- a. passing a first packet of information electronically from the display unit of the first wearer to the display unit of the second wearer, the information including data pertaining to a first set of relationships characterizing the social network of the first wearer (col. 3, line 66 to col. 4 line 23); and
- b. displaying text information on the display unit based on the commonalities between the first set of relationships and a second set of relationship.

Though the reference fails to clearly state the that LCD in the device displays text information on the display unit of the second wearer that is based upon a comparison between the first packet of information and a second packet of information contained within the display unit of the second wearer, the reference does infer that in col. 5, last paragraph. In the paragraph, the reference explains the use of the LEDs to express the level of information matching while in this paragraph the reference also discusses using a LCD 212 to display text, though it does not clearly indicate that the text information expressing the affinity between the social networks of the two wearers. The discussion of the use of LEDs to indicate the matching between the two databases is only another embodiment wherein the LEDs are used for that purpose instead of the display.

Claim 2:

The displaying information step in Lightman is carried out in response to the receipt by the display unit of the second wearer of the first packet of information.

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Claim 3:

Each display unit 200 is worn on the person of the wearer in a manner to be visible to the wearer of the other display unit. Col. 6, first paragraph.

Claim 4:

In Lightman's system, the first wearer takes an action based upon the displayed information on the display of the second wearer.

Claim 5:

In Lightman's system, the action being using at least a portion of the second packet of information.

Claims 6, 8, 15-19:

The reference suggests the device is used in social filtering though it fails to specifically disclosed that the action being an attempt to find a person. However, usually people are involved in social filtering. Thus, one skilled in the art would have readily recognized using the system of Lightman's for finding commonalities of in the social relation of the wearer and a third person or persons and to find the third person as desired. In Lightman's system, the second packet of information being information related to a third person who is not the first or second wearer but the person the first wearer is looking for.

Claim 7:

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The second packet of information in Lightman's is information related people having a historical relationship with the second wearer.

Claims 11 and 12:

Though the reference fails to disclose that the first and second packets of information being time-related, it would have been obvious to a skilled artisan to use the Lightman device for time-related information purposes as desired.

Claims 13-14:

The reference suggests the device is used in social filtering. Thus, one skilled in the art would have readily recognized using the system of Lightman's for finding commonalities of in the social relation of the wearer and a third person or persons and to find the third person as desired. Furthermore, one skilled in the art would have readily recognized implementing the system in Lightman to provide any information as desired, it is only a matter of choice in design.

Claim 20:

Lightman et al. (Lightman) discloses a method of communicating face-to-face using two display units, the display unit of a second wearer being worn on his or her person in a manner visible to a first wearer, comprising:

- c. passing a first packet of information electronically from the display unit of the first wearer to the display unit of the second wearer, the information including data pertaining to the social network of the first wearer (col. 3, line 66 to col. 4 line 23); and
- d. displaying text information on the display unit of the second wearer that is based upon information about commonalities between the relationship information of the first wearer contained in the first packet of information, the second packet of information

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contained within the display unit of the second wearer that contains relationship information including identifications of people known to the second wearer.

Though the reference fails to clearly state that the LCD in the device displays text information on the display unit of the second wearer that is based upon a comparison between the first packet of information and a second packet of information contained within the display unit of the second wearer, the reference does infer that in col. 5, last paragraph. In the paragraph, the reference explains the use of the LEDs to express the level of information matching while in this paragraph the reference also discusses using a LCD 212 to display text, though it does not clearly indicate that the text information expressing the affinity between the social networks of the two wearers. The discussion of the use of LEDs to indicate the matching between the two databases is only another embodiment wherein the LEDs are used for that purpose instead of the display.

Regarding the claimed information including personal information about the wearer that includes information relating to people known to the first wearer, the reference suggests the device is used in social filtering though it fails to specifically disclose that the information relating to people known to the first wearer. However, usually people are involved in social filtering. Thus, one skilled in the art would have readily recognized using the system of Lightman's for finding commonalities of in the social relation of the wearer, thus, would include information relating to people known to the first wearer or second wearer for social filtering purposes.

Claim 28:



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One skilled in the art would have readily recognized adding information relating to the second wearer to the first set of relationships information because the first and second wearer have socially met.

Claim 29:

The data describing the first and second sets of relationships disclosed in Lightman is passively generated by the display units without direct user input, as shown in fig. 5.

Claim 30:

The information about the commonalities in the Lightman system comprises relationships shared in common by the first and the second set, such as ID of a person known by both wearers.

8. Claims 21-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Lightman et al. (US Patent No. 6,711,414) in view of Lee (US 2002/0180762).

Claim 21:

Lightman discloses a wearable electronic display unit for displaying images and for communicating with other similar wearable displays, comprising:

- a. A first display unit 200 capable of displaying text and graphics, having access to information the first person's social network database; and
- b. Information transmitting and receiving interface (col. 6, lines 36-54), when the interface faces in a direction of a short-range substantially unidirectional communication the communication is possible between displays worn by the first and second persons, the display having the capability to (1) receive information relating to another person's social

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network, (2) analyze the received information and the information about the first person's social network, and (3) display information based on the analysis.

See col. 3, line 66 to col. 4, line 23; col. 5, line 15 to col. 6, line 54; col. 8, lines 12-67; and col. 9, lines 1-46.

Lightman fails to disclose a first mode and second mode. However, the concept of displaying information on a display worn by a wearer, wherein text is display in two different modes, first mode is adapted for viewing at a distance by a second person, and second is adapted for viewing by a first person (wearer) is known in the art as taught in Lee. See front-page figure. In light of this teaching, a skilled artisan would have readily recognized incorporating this feature in the Lightman system because it will aid the viewer in viewing the display.

Claim 22:

The short-range substantially unidirectional communication is carried on a channel that transmits and receives an infrared beam (col. 6, lines 36-54).

Claim 23:

Lee teaches using a sensor 140 that detects the orientation of the display relative to the vertical and provides an electronic signal to indicate the orientation.

Claims 24 and 26:

The display in the combined system of Lightman and Lee operating in the first mode, wherein the text has one orientation relative to vertical, in the second mode, the text has a different orientation relative to vertical. Front-page figure.

Claim 25:

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Though Lightman fails to disclose changing to a larger text size in a second mode, one of ordinary skilled in the art would have readily recognized changing the text font to a larger font so that the text can easily be viewed by a viewer.

Claim 27:

Sensor 140 in Lee detects whether the display is oriented substantially in one orientation relative to vertical, or substantially in another vertical orientation relative to vertical, and provides an electronic signal to indicate the orientation whereby, in response to the signal from the sensor indicating that the display is oriented substantially in the one orientation, the display displays text and graphics in the first mode, and in response to a signal from the sensor that the display is oriented in the opposite orientation, the display displays text and graphics in the second mode.

*Applicant's Arguments*

9. Applicant's arguments have been considered but they are not deemed persuasive.

Argument 1:

"Claim 1 now has been amended to specifically point Out that information about commonalities between two sets of "relationships characterizing [THC] social network[s]" of two users is found. This makes it clear that the subject invention is very different from Lightman, where one user enters his/her interest/search criteria," and these criteria are compared to a single set of data -the list of whom the second user has met or where he or she has been. (See col. 5,

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lines 63-64.) In examples of this function, Lightman describes his "social filtering" as a technique for finding people or things about which a first user is interested, but has been unable to find. Thus, Lightman's searching is based upon criteria specifically entered by the person doing the searching. (Column 9, lines 33-46.) These predetermined search criteria are compared to information collected by a second user's device to see if that second user can help the searcher find the person or thing. Examples are requesting to be notified whoa meeting someone who "has previously talked with a particular individual" (column 11, lines 41-48, emphasis added); or someone who "has visited an area or booth" (column 11, lines 47-48); or someone who has come across a particular product at the event (column 9, lines 35-38). Therefore, Lightman uses his term "social filtering" and "social filtering criteria" in a narrow sense to mean applying specified search criteria to a set of information relating to another person who is present at the same event with the searcher.

Applicants have a much broader and more conventional meaning for their term "social network," which they have clarified by amending claim 1 to describe comparing "set[s] of relationships characterizing a social network of the first [or second] user." By comparing the sets of relationships of both users, two people at the meeting can find out immediately that they know people in common, without having to specifically input who the those people might be. (See a complete description of this on page 8, lines 8-24 of the specification.) Claim I recites that the comparison being made makes use of both sets of relationships - people known to the wearer and people known to another person. This is very different from what is taught or suggested by Lightman."

Similar argument has been made regarding claim 20.

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Argument 2:

“Lee is devoid of any disclosure, teaching or suggestion that this phone display have a mode ‘for viewing at a distance by a second person.’”.

*Response to Applicant's Arguments*

Response to argument 1:

Though claims 1 and 20 of the present invention uses the term “social network” which includes broader meaning to describe comparing sets for relationships, it should be noted that the Lightman system and method does the same thing. Though Lightman uses the term “social filtering” and “social filtering criteria”, the device and method in Lightman is also to pass information between the first display to the second display, such information pertaining to a first set of relationships and is compared to the second set of relationships. Also, Applicant should note that “first set of relationship” indeed is a criteria of social filtering.

Response to argument 1:

It is submitted that Lee has a display mode to be viewed by the user or wearer of the device (fig. 2b). Thus, it has a mode for being read close up by the user of the device. The other mode is for being viewed by the passersby, therefore, it is used for being viewed at a distance by a second person.

For the above stated reason, the rejection is maintained.

***Conclusion***

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long, sweeping horizontal stroke extending to the right.

Julie Lieu  
Primary Examiner  
Art Unit 2612

Sept. 08, 06